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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/683,571 | 10/09/2003 | Joseph C. McAlexander | MDFH01-00004 | 7658 |
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| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/683,571

Applicant(s)

MCALEXANDER, JOSEPH C.

Examiner

David Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☒ Claim(s) 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/08/07 have been fully considered but they are not persuasive.

Applicants argue: "The Office Action cites paragraphs [0106]-[0107] and Figure 13 of Menard. However, these portions of Menard lack any mention of switching a "mode of operation" of a mobile device so that the mobile device (1) transmits its own position information to another mobile device for relaying to a central monitoring system and (2) stops relaying another device's position information directly to the central monitoring system."

Examiner disagrees.

Firstly, "switching a mode of operation of a mobile device so that the mobile device stops relaying another device's position information directly to the central monitoring system" is not described in the applicants' specification. Applicants mention in the Remarks that Pars. [0034], [0039] and [0044] clearly recite or describe this limitation. Nowhere in these paragraphs describes this limitation. Below are Pars. [0034], [0039] and [0044] of the application.

[0034] Primary mobile unit 120 comprises antennas 121, 122 and 123. According to an exemplary embodiment of the present invention, primary mobile unit 120 comprises a Global Positioning System (GPS) receiver that determines the position of primary mobile unit 120 using radio frequency signals received from global positioning satellite system 190 via antenna 121. Primary mobile unit 120 also comprises a 2-way paging transceiver that communicates with primary base station 110 and the N secondary mobile units (e.g., units 130 and 140). The paging transceiver communicates bi-directionally with 2-way paging system 180 via antenna 122.

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Finally, primary mobile unit 120 comprises a local RF transceiver that communicates directly with one or more of primary base station 110 and the N secondary mobile units over relatively short distances using antenna 123.

[0039] Controller 240 controls the overall operation of primary base station 110, including the operation of GPS receiver 210, paging transceiver 220 and local RF transceiver 230. According to an exemplary embodiment, controller 240 may comprise a data processor and an associated memory, wherein the data processor executes an operating system program stored in the memory. Controller 240 uses I/O interface 250 to communicate with external systems across wireline 115. These external systems may include other primary base stations. Controller 240 also receives user commands and data via user input device 260 and outputs data, alerts, instructions and the like to the user via display 270.

[0044] It should be noted that primary base station 110 is not required to be stationary and may, in fact, be a mobile device. The term "primary base station" is intended to designate primary base station 110 as a central monitoring device to which mobile unit location information is transmitted, either directly or by relay. This is true whether primary base station 110 is located at a fixed geographical position or is on the move.

Moreover, Applicants mention that the Applicant's specification clearly notes that a mobile unit acting in the secondary mode "may or may not" receive and relay position information from other secondary mobile units. (Application, Par. [044]). Par. [0044] does not disclose the above matter. Examiner finds that par. [0050] mentions the term "may or may not". However, Par. [0050] does not mention or describe the limitation (switching the "mode of

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operation” of a first mobile device such that the first mobile device “stops relaying the second position information directly to the central monitoring system”).

For purpose of examining, Examiner assumes this limitation as “a mobile unit can switch modes to become a primary mobile unit and establish a new communication link to primary base station” mentioned in par. [0056] of the application. This limitation is clearly described by Menard reference in pars. [0106], [0107], and fig. 13 (the device 300 or device 100 switches from short range to long range or vice versa depending on distance of devices 300 and 100. Moreover, the devices 300 or 100 can establish a new communication link to base station 415 as shown in fig. 13).

Secondly, Menard clearly mentions of switching a "mode of operation" of a mobile device so that the mobile device transmits its own position information to another mobile device for relaying to a central monitoring system. Menard mentions in par. [0106] of the Menard reference:

[0106] in one embodiment the system may employ different portions of the network to provide short range or long range network connections, depending on the distance between the second device 300A and tag 100E. In one such embodiment, the network automatically adjusts for different required transmission distances; and [0107] the transceiver is compatible with both a long range communication protocol and a short range communication protocol. For example, a second device located a long distance away, such as several miles, may communicate with the tag using a cellular telephone compatible with the long range protocol of the tag; and [0113] In one embodiment, the tag 100E transmits location information relative to the location of second device 300 or a fixed location. In one embodiment, the location information includes a

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geographic position expressed by latitude and longitudinal coordinates. The location information provided to second device 300 may include directional, distance, and velocity information, which may assist in locating the object, person or animal carrying tag 100E.

It is clearly that Menard clearly mentions of switching a "mode of operation" such as switching from long range mode to short range mode depends on distance of mobile device and tag device. Therefore, Menard discloses switching a "mode of operation" of a mobile device so that the mobile device transmits its own position information to another mobile device for relaying to a central monitoring system.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21,24 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 21,24 and 34, the limitation "switching a mode of operation of the first mobile device such that the first mobile device stops relaying the second position information directly to the central monitoring system" is not described in the specification.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Menard et al. (US 2002/0169539 A1).

Regarding claim 21, Menard et al disclose a method comprising determining, at a first mobile device capable of operating within a tracking system, a position of the first mobile device (see fig. 3, and par. 0051); transmitting, from the first mobile device to a central monitoring system associated with the tracking system, first position information associated with the first mobile device (see fig. 3, par. 0051, 0088), and relaying from the first mobile device to the central monitoring system second position information associated with a second mobile device (see fig. 3, pars. 0051, 0088 and fig. 13). Menard et al. also disclose switching a mode of operation of the first mobile device such that the first mobile device transmits the first position information to at least one of the second mobile device and a third mobile device for relaying to the central monitoring system (see pars. 0106-0107 and fig. 13).

Regarding claim 24, Menard et al discloses a central monitoring system; and a first mobile device capable of determining a position of the first mobile device (see fig. 3, and par. 0051); transmitting to the central monitoring system first position information associated with the first mobile device (see fig. 3, and par. 0051, 0088); and relaying to the central monitoring system second position information associated with a second mobile device (see fig. 3, par. 0051,

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0088 and fig. 13, its description); switching a mode of operation of the first mobile device such that the first mobile device transmits the first position information to at least one of the second mobile device and a third mobile device for relaying to the central monitoring system (see pars. 0106-0107 and fig. 13).

Regarding claim 34, Menard et al discloses a mobile device comprising a position determining unit capable of determining a position of the first mobile device; and at least one transceiver capable of transmitting, to a central monitoring system, first position information associated with the mobile device (see fig. 3, pars. 0051, 0088 and figs. 3 and 13); and relaying to the central monitoring system second position information associated with a second mobile device (see fig. 3, pars. 0051, 0088 and fig. 3 and 13), switching a mode of operation of the first mobile device such that the first mobile device transmits the first position information to at least one of the second mobile device and a third mobile device for relaying to the central monitoring system (see pars. 0106-0107 and fig. 13).

Regarding claims 22-23,25-33 and 35-40, Menard et al also discloses wherein the relaying of the second position information to the central monitoring system by the first mobile device occurs when the second mobile device is within a threshold distance of the first mobile device (see par. 0076); wherein the second mobile device is capable of transmitting the second position information directly to the central, monitoring system when the second mobile device is not within the threshold distance of the first mobile device (see figs. 13-16); wherein a value of the threshold distance is static (see par. 0082); wherein a value of the threshold distance is dynamic (see par. 0082); wherein at least one of the first and second mobile device comprises a GPS unit (see par. 0027); wherein at least one of the first and the second mobile devices

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comprises a transceiver capable of receiving signals from an RF transponder (see figs. 13-16); wherein the central monitoring system is capable of monitoring one or more positions of at least one of the first and second mobile devices while the at least one of the first and second mobile devices is within a defined geographical boundary (see par. 0088); wherein the central monitoring system comprises a first base station and a second base station each capable of receiving a beacon signal from the first mobile device (see figs. 13-16); wherein the central monitoring system is capable of determining the position of the first mobile device using a triangulation algorithm that uses the beacon signal received from the first mobile device by the first base station and the second base station (see fig. 3, pars. 0051, 0088 and fig. 3 and 13).

Allowable Subject Matter

4. Claim 42 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Menard et al disclose a method comprising all limitations of claim 21. Menard et al do not mention transmitting, from the first mobile device to the central monitoring system, a beacon signal only when the first mobile device cannot determine its location, in combination with the limitations claimed in claim 21.

Conclusion

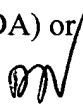
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q. Nguyen whose telephone number is 571-272-7844. The examiner can normally be reached on 8:30AM-5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH H. FEILD can be reached on (571)272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEAN GELIN
PRIMARY EXAMINER


David Q Nguyen
Examiner
Art Unit 2617

